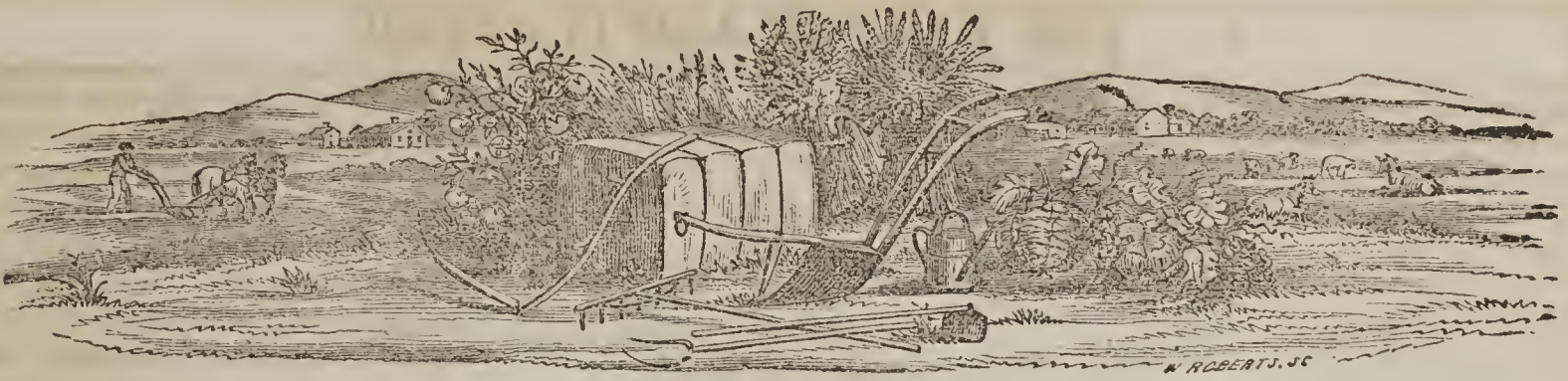


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FARMER AND PLANTER.

DEVOTED TO AGRICULTURE, HORTICULTURE, MECHANICS, DOMESTIC AND RURAL ECONOMY.

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Cotton and its Prospects.

American and Foreign Product; Demand and Supply of the world; India Cotton and Competition; Future Prospects, &c.

No agricultural staple has ever produced so great an effect upon the civilization of the world as cotton. You cannot civilize man until you first clothe his nakedness. After the knowledge of good and evil, the first thing done by our first parents was to weave fig leaves for aprons. A naked man must necessarily become a savage man. Heretofore, in the history of the world, there has been no cheap and abundant article raised by which the poor and the helpless could be clothed on an extensive scale. Hence it is that civilization has had narrow bounds. Before the invention of gunpowder and artillery, those people who acquired the arts and wealth of civilization were constantly overrun by barbarian and brutal numbers, who banded together for plunder and indulgence.—since those inventions, the wealthy and refined portions of the earth have been nurtured. The tide has been turned and the course of invasion has been reversed. The more cultivated and wealthy nations overrun those less so. But the dif-

ficulty was to civilize after they had conquered. They had no means of extending commerce and its refinements, for want of an abundant and cheap article by which to clothe the nakedness of barbarian life. But the invention of machinery in New and Old England, together with the vast production of cotton by slave labor in the South, have supplied the deficiency.

There is not a battle that England has fought in India, Afghanistan, or on the plains of Mexico, that did not extend the consumption of cotton, and in time, introduce trade and commerce, and with them the arts and refinements of life. It is thus that Providence has ever worked upon the destinies of man. When the Lord selected the first born of Egypt as victims to illustrate his power and vindicate his decrees, and left his bloody sign upon the lintels and side-posts, that the destroying angel might pass over his chosen people, this visitation of an awful dispensation was but a part of His providence in working out the redemption of Israel.

And when, in modern times, He chooses to mark the tracks of civilization upon the bloody fields of conquest, it is but to rouse a barbarian people from their stupor and indolence, and quicken a worthless and profligate mass with new enterprise and life, and fit them for that great day of universal light and peace which He has promised to man in the millennium. It is by war you conquer an ignorant and barbarian people, and then by commerce and trade with them you introduce the comforts and arts of civilization.

In this point of view, the culture of cotton becomes deeply interesting to the statesman and philanthropist. How far can it be extended, and what can we cal-

culate on its production in the future?

The aggregate production for the last ten years in the states of this Confederacy has been 21,370,000 bags, and the average per year has been 2,137,000 bales. We may reasonably infer that it has nearly reached its maximum. In 1839 and '40 the production was 2,177,835 bags; while in 1846 and '47, it was only 1,778,051. In 1842 and '43 the production was 2,378,875, and in 1844 and '45 it was 2,394,503, the largest crop ever raised, except the crop of 1848 and '49, which was 2,728,596, while the crop of 1850 and '51 will be about 2,230,000.—Thus it would appear there has been little or no increase in production in the last ten years, the crop of 1839-'40 being about equal to the last crop. The reason for this is obvious. The general idea used to be, that the only limitation to the production of cotton was the proper climate and soil, and that of course, then, there was scarcely any limit in the United States. But this is a great mistake. The great limitation to production is labor. Whenever cotton rises to 10 cents, labor becomes too dear to increase production rapidly. When cotton rises, sugar, rice and tobacco also bear a good price, and breadstuffs rise also, so there can be no transfer of labor, it being in good demand elsewhere. By excluding, as well as we can, all those in the cotton States who are engaged in the culture of rice and sugar, as well as those in the mountains of Georgia, Alabama, and South Carolina, who produce grain only, and by adding those in North Carolina, Tennessee and Arkansas, who are engaged partially in producing cotton, we estimate the slaves at 1,200,000. And of these we estimate 800,000 as workers, which is probably not excessive, when

We consider that the southwest, the great cotton region, is newly settled, and the number of children out of all proportion less than in negroes peopled by a natural growth of population. There are about 100,000 white laborers, also, engaged in the production of cotton. This, added to the 800,000 slaves, would make 900,000 actual workers in culture. In the real cotton region, perhaps the average number of acres per hand is ten; whereas, high up in Georgia, Alabama, South Carolina, Mississippi, Tennessee and Arkansas, the average is not three acres, white and black, per hand. Besides, in these same regions the number of acres in grain per hand will be at least seven. The average per hand in cotton may then be put down at five acres.—This would give 4,500,000 acres in cotton. Then take the 2,137,000 bags as the average production for the last ten years, which is a fact, and we have the average production per acre at a little under a half a bale—or a little more than two acres per bale—and to the 900,000 workers it would not be quite $2\frac{1}{2}$ bags per hand. And all practical men know this is about the production in any given section embracing fifty miles square.

To see that the true limitation upon the production of cotton is labor, and how difficult it is to transfer labor, we have but to estimate the capital engaged in cotton.

The Secretary of the Treasury, in his report, made March 4th, 1836, estimated the capital invested in raising cotton at \$771,000,000. But he then estimated the number of acres in cotton at 2,000,000, and the annual product at 300 lbs. nett cotton per acre, which was entirely too large an estimate. No doubt he took the estimate of some fine section in Mississippi, made by sanguine young planters as to the production per acre there, and upon that, estimated the number of acres necessary to produce the crop as known. He made the number of acres too small and the production too large.—By the best calculations from the census of 1840, and other sources, we would estimate the number of slaves engaged in producing:—

1. Cotton at 1,200,000, which at \$500.....	\$600,000,000
2. Land, 4,500,000 acres, at \$10.....	45,000,000
3. Land in grain, 6,300,000 acres, at \$10.....	63,000,000
4. Land in timber, pasture, &c., 14,000,000 at \$3....	42,000,000
5. Mules and horses, 400,000	

at \$100.....	40,000,000
6. Hogs and sheep, 4,500,000 at \$1.....	4,500,000
7. Cattle, 300,000, at \$5....	1,500,000
8. Ploughs, 500,000, at \$2..	1,000,000
9. Wagons and other plantation implements, &c....	1,000,000
	<u>\$798,000,000</u>

Put the amount invested in the production of cotton, at..... \$800,000,000

Of course this does not embrace the whole capital of the cotton region, commercial, manufacturing, professional, mechanical and artisan; but I merely mean to calculate the amount actually vested in raising the 2,173,000 bags produced annually for the last ten years, as shown from the tables.

If the \$800,000,000 of capital produce an average in ten years of 2,137,000 bales per year, it will take \$100,000,000 of capital to produce 267,125 bags. Thus we will see, that to make this a permanent increase in the production of cotton per annum, for the next ten years, it will require a transfer of capital, or an increase of capital, which is the same thing, of (\$100,000,000.) One hundred million of dollars! This calculation is made upon an estimate of cotton at 10 cents, and whatever it gets over that, the increase in the price of labor is so great, that it would require more than \$100,000,000 to produce the 267,125 bags; and when it gets below the 10 cents, then the inducement is not so great to increase the production. A transfer in capital of \$100,000,000 from other departments of labor, to that of cotton, cannot be done immediately, without a shock, or a great rise in those productions from which such capital is abstracted. There may be an increase in a cotton crop from fine seasons and suitable years; but take the average of ten years, and it is the true mode by which to calculate the capacity of the country to produce the article.—There is a great mistake as to the supposed capacity of the country to produce any amount of it. Counting-house clerks, who know nothing of the country, make the estimates, and it is taken for granted, in New and Old England, that there is no difficulty in producing any amount.—But when you come to calculate that it takes at least \$100,000,000 vested capital to produce permanently 267,125 bags, you then see the difficulties. When we calculate again, that the white population of these states now exceeds 20,000,000 of people, and that in twenty years the white population alone will equal

37,000,000; if we allow for emigration here, we will see that the time is rapidly coming, when a great question in society here will be: how is that population to be fed? Heretofore, our population has been so sparse that there has literally been no heed taken as to what we should eat, or wherewithal we should be clothed. But the time is coming when we shall have to consider this matter.—Whenever this becomes the case, there will be little room for cotton. Land and labor will be too important in raising breadstuffs. The encroachments of the white population, and the demand for food to supply them, will make a great limitation on the production of cotton.—This is another element that has never been calculated. The production of cotton belongs to a sparse population, and the protracted attention of slave labor is essential to produce it on an extensive scale. Besides this, the vast increase of white population, will be pressing down upon the slave population. The law of population is, that where two races come into contact, under one government, and, from density, the great interest in society is to support that population, the race which is the stronger will eat out the weaker. This arises from the necessity of self-preservation. In some instances, this has been prevented by amalgamation; but where the races are so distinct as the white and black, and where the union is so loathsome, this is impossible.

In less than fifty years, this struggle for support will be sensibly felt in this country. In fact, the census of 1840 exhibited symptoms of it. From 1810 to 1820, the increase in the slave race in the United States, was 30 per cent.; from 1820 to 1830, it was $29\frac{1}{2}$ per cent.; and from 1830 to 1840, it was only $22\frac{1}{2}$ per cent. This last census, as far as I have been able to get any authentic information, seems to be a very little over 22 per cent. While the increase of the white population of the United States, since 1840, has been over 35 per cent., the increase of the slave population is but little over 22 per cent. It requires but little foresight to perceive the consequences. To say the least, it will but press down upon the cotton region in the next twenty years, and limit its increased production. The real cotton belt is at any rate much more narrow than it was formerly supposed to be. The latitude of $32\frac{1}{2}^{\circ}$ may be said to be its centre in the Southern States. The quantity per acre

will diminish as rapidly going south of that latitude, as it will going north of it. True, this varies again, according to location. Altitude and distance from the ocean varies climate more than latitude. Our mountains run northeast and southwest, parallel with the sea coast, and terminate low down in Georgia and Alabama, so that as you pursue the latitude of $33\frac{1}{2}$ degrees west, you come to high lands in both these states, which make it difficult for cotton to mature abundantly; and then as you cross Alabama, and come to the depressed valley of the Mississippi, this parallel we find to be the finest for the heaviest production of cotton.

It is said 270 feet in altitude is equal to one degree in latitude. Soon after you pass the Mississippi Valley, and rise to the spurs of the Rocky Mountains, you get rapidly out of the cotton region.—The highlands and “Northers” in Texas, limit the cotton region in that State to a lower latitude than any other portion of the South.

There are one thousand millions of inhabitants in the world, and of that number, not more than five hundred millions, or half the population of the earth, ever use cotton as an article of clothing. The production of cotton throughout the world may be estimated at about twelve hundred million of pounds annually, of which the United States produce 845,000,000 pounds—calculating the average crop of 2,121,000, and each bag at near 400 pounds. The Secretary of the Treasury (Doc. 146, 4th vol. Ex. Doc. 135—36) estimates the production of other countries as follows, viz: India, 135,000,000 pounds; rest of Asia, 110,000,000 pounds; Brazil, 39,000,000; West Indies, 8,000,000; Egypt, 25,000,000; rest of Africa, 31,000,000; Mexico and South America, exclusive of Brazil, 35,000,000, and 13,000,000 pounds elsewhere. If one half the population of the earth (which is doubtful) now use this twelve hundred millions of cotton, it would make two and a half pounds per head. England and the United States now consume about thirteen pounds per head, and so will all highly civilized and commercial people, while those less so will consume less.—The Turks, for instance, only use now about three pounds per head. Suppose, then, the thousand million of people were to consume only three pounds per head, it would make over 7,000,000,000 bags at 400 lbs. as the annual demand, and allow them two and a half pounds, which is now the consumption of only half the population of the earth, and it would make a demand for over six millions of bags. This increasing consumption is going on yearly, as commerce and civilization advance, and the improvements in intercourse will increase it in a geometrical ratio; and as nations become more refined and more opulent, its consumption, instead of being only two or three pounds per head will reach ten pounds in the various forms in which it may be used. How vain and ignorant it is to talk of production out-running consumption! Such a conclusion implies that commerce and the arts, with their neces-

sary consequences, wealth, comfort, and luxury, will be checked in their triumphant progress, and mankind fall back into barbarism. This same cry as to production out-running consumption, was made at the increase of the tariff in 1828 and in 1832, when we raised 800,000 bags only, and regularly afterwards, whenever the tariff was to be raised, the same assertions were made. As far back as 1820, a Frenchman named JUMEL, introduced the culture of Brazil cotton into Egypt. The Pacha ordered it to be extended on a large scale. *Nile's Register*, in October, 1825, raised the alarm, and said, “Egypt is our great and fearful rival, and has a capacity to supply much more than we have ever produced.” So in 1842, the Northern papers, and particularly the *National Intelligencer*, were full of calculations to prove we were to be overwhelmed by the production of East India cotton. And the same papers could be quoted to prove, from figures, that nothing could save the South from the ruin of this competition, but a tariff for protection, the best terms with our kind task masters. We were supposed to be infants who were to be kept in the nursery and fed on pap by Northern nurses!

The foregoing is from De Bow's Review.—The length of this most admirable paper obliges us to divide it. The remainder will be given in the next number.—Eds.

Sweet Bacon.—This may be a little more difficult, but there is not much risk if salted immediately, and well rubbed in, first adding a tablespoonful of sugar and a teaspoonful of salt-petre to each ham, using about six pounds of salt to 100 hundred lbs of meat. Do not make smoke with rotten wood or old chunks. See that the servant who has charge of it, never uses anything but sound green wood—hickory, maple, ash, or elm. Some use cobs. We cannot recommend them. Let the smoke house be open and do not try to smoke too fast.

Salt and Ashes for Stock.—At all seasons of the year, cattle should have salt and ashes given to them. Especially is this necessary during those periods when they are confined to green and fermentable food, which induces flatulency. The action of this mixture is highly salutary, at all times, if given in small quantities.

Oil of Roses.—Roses (barely opened), 12 ounces; olive oil, 16 ounces. Beat them together in a mortar, let them remain a few days, then express the oil.

Shelter for Stock.

If there is reason in any thing, stock should be provided with comfortable shelter during the bad weather of winter. The uniform cold of the North is not more destructive to beasts than the changeable weather of the latter part of December, January, and February in the South, nor is the snow, in that region, which from its dryness rolls from the animals as it falls, as dreadful as our pelting, chilling rains from the Northeast. We venture the opinion, if an accurate statistical account of the cows, calves, and yearlings, that die during the winter, could be kept

throughout the United States, the loss would be found to be the greater at the South; and this for no other reason than because the climate is thought so mild there is no need of shelter for stock, and they are consequently left to suffer from exposure beyond what their constitutions can bear. But who, on reflection, can doubt that all animals about the farm-house are the better for being protected from the long, cold, drizzling storms of our winters, or who, with any show of reason, can question the economy of providing them shelter? There is in it a saving of food that addresses itself to our consideration at all times, but from the shortness of the crops with more than usual force this year. It is a settled fact that clothing or shelter is a measurable substitute or compensation for food, and whatever prevents the escape of animal heat from the body diminishes the necessity and expense of generating anew. The heat of the animal body must be kept up to a certain degree of temperature, and if the body is exposed to winds and rains, it thereby sustains a loss that must be restored, and can only be done by the consumption of an increased quantity of food. Hence the food, that would remain unconsumed, or if consumed would be converted into fat or muscle is expended in keeping the animal in the same given condition. So much is a clear and total loss. Nature illustrates the relation of climate and temperature to food in her provision for the inhabitants of the different zones of the earth. The Laplander, who is exposed to the rigors of intense cold, requires a nutritious and stimulating food, and is provided with it in the train oil. The inhabitant of the tropical region suffers a less loss of heat, and Providence has assigned him a milder and less carbonaceous diet in fruits. The food prepared for the inhabitants of Southern climes (says Liebig) does not contain in a fresh state more than 12 per cent. of carbon, while the blubber and train oil which feed the inhabitants of polar regions contain 66 to 80 per cent. of that element. “Cold and hunger united very soon produce exhanstion.” “In the animal body the food is the fuel.” “A starving man is soon frozen to death.” “Our clothing is merely an equivalent for a certain amount of food.” “The more warmly we are clothed the less urgent becomes the appetite for food, because the loss of heat by cooling, and consequently the amount of heat to be supplied by the food is diminished.—If we were to go naked like certain savage tribes, or if in hunting or fishing we were exposed to the same degree of cold as the Samoydes we should be able with ease to consume ten pounds of flesh, and perhaps a dozen of tallow candles into the bargain, daily, as warmly clad travellers have related of these people. We should then also be able to take the same quantity of brandy or train oil without bad effects, because the carbon and hydrogen of these substances would only suffice to keep up the equilibrium between the external temperature and that of our bodies.”

The cooling of the body, by whatever cause it may be produced, increases the amount of food necessary.” The organism of man and

beast is the same, and there would seem abundant testimony in proof of the advantage of giving protection from inclement weather to both. Whether the animal is destined for labor, the shambles, or the dairy, it is the same, he is benefited by shelter from storms. But interest and economy are not the only considerations that should operate upon our minds in the matter; we should not forget the gratification we have in yielding obedience to the better promptings of humanity. Who, that has sensibility and a conscience, can look unmoved upon the animal that gives him daily milk as she stands covered with sleet, and trembling with cold beneath the dropping eaves, or perched in the fence corner, seeking the protection a few open rails can give her?

Among the evidences of a sound head and heart in a farmer, we regard good buildings for himself, his negroes, horses, mules, cattle, hogs, dogs, hens, and every animal upon the premises.

Troughs are an appurtenance to stables and barns by no means common and yet of considerable importance. In wet weather negroes have such an unconquerable love of the quarter and kitchen fires, and such a dislike of the task of taking horses and cattle a distance for water, they will elude the vigilance of master, overseer, and every body else, and leave at times the stock whole days without a drop of water. But suppose the negroes are a little more reliable, they have more fidelity than common, if they do not hurry the horses to the water, allow them half time to drink, and then try their speed in a quarter race back to the stables. The watering is at best in nine cases out of ten irregular, causing the animal one day to suffer for want of water, and the next to injure himself by drinking too much. With such treatment no animal can thrive. To obviate it, let troughs be placed under the eaves of the barns and stables for the purpose of catching the rain; the stock will then be sure to get water enough in bad weather and without exposure. Where practicable we would also recommend invariably to run a lane to the branch or place of watering.

Millet Grass and Egyptian Millet.

MESSRS. EDITORS:—It may not be amiss to say something of the forage crop which I incidentally alluded to in my last. I allude particularly to the Millet tribe. I had to purchase the seed of the Millet grass this year at \$2½ per bushel.—Owing to the very unfavorable season last year, I nearly lost seed, and gave away what I had.—I plow my land early in March with a two horse plow; and just here I beg to say, for all time, that I break up all land with two horses, never planting anything after one horse breaking, using a nine inch plow, so as to plow deeper than with a 10 to 12 inch plow. I select a piece of good land, or make it so with manure. This land is again cross plowed with a one horse plow, about the middle of April, immediately harrowed, the seed well wetted with brine, then dried with ashes, and 10 quarts sown to the acre, bushed or harrowed in—or better, I run a heavy block (my cotton coverers) over them, thus levelling the land and breaking the clods. It is important

not to sow too early, and yet to sow as early as the young plant will receive warmth to grow off. By waiting until fifteenth of April, the first crop of crab grass is plowed in; the seed are sown on fresh land, and will grow off before the next crop of grass gets a start. The plant grows as slow as crab grass for a while, and if other seed are started they will outgrow the Millet. I have cut, when heads were turning, three tons per acre, by weight and measurement—no guessing; it makes an excellent winter food for cattle, oxen and mules. My oxen were sustained upon it all the past winter. I have yet a few seed of those I bought and have saved as many as I need, I can therefore spare either.

Of Egyptian Millet. I first saw it, long time ago, when in Columbia, a school boy, at Mr. N. Herbermont, Sr.'s, and at, as we then called him, "Old Tommy Braid's." I have grown it successfully, and have this year, dry as it has been, cut it twice, taking off 10 (four mule) loads, from perhaps two acres. I shall cut twice or thrice more.

I prepare land well, by plowing early, then, from 1st to 10th of April, throw up four feet beds with a one horse plow, on the best land I have—harrow, and mark off for seed; drop 10 to 20 every two feet, and cover as I do cotton. I then bar off or rather (I use the scraper) scrape as in cotton, after I earth, plow out middles, and after each cutting give a stirring—keeping down all grass and weeds, so as to give the crop the advantage.

Upon these two I base my winter feed, saving about one half of my fodder. I dislike stripping blades more than any other part of my business, it being so hot and close, and at a season when I prefer hands should work along at their leisure. I generally save about 700 to 1000 bundles, of two pounds each, per hand, and can use all, at that. My reliance for summer—all deriders to the contrary—is the much abused Bermuda grass. And as I have a query from Texas, and another from Marion District, I will just here say how I plant it, and thus, perhaps, get you two subscribers.

I select the land which is convenient, either to my lots or to some part of the farm, as I design to make a permanent pasture; good, better or best lands, are worthy of consideration—but I always keep in view that, Bermuda is a welcome friend when in its place, but may be an unwelcome guest if permitted to intrude. Keep it from land designed for culture. When determined upon, give it a good tith—I think the fall the best for level land. Whilst the land is fresh, it is best to plant the grass, as it saves marking off. I have the grass taken up with a sharp spade, as is done by the English and Northern people in turfing, shaving off the top soil about one inch into squares the width of the spade, then cut with the spade about one inch square. A hand takes a parcel, drops it about three feet apart each way and steps upon it, thus on the fresh land these little turfs are pressed into the earth. I have had it on fair land, to cover the land entire. If it is desired to mow it, I would select a piece of rich, low ground; drain well, and dress occasionally with a top dressing of

manure. I believe a piece of good land, made rich, will grow over four tons of excellent hay per year; and that Bermuda grass will pay a good interest upon \$100 per acre. Thus enabling the grower to go to any ordinary expense of ditching and hedging it in, to prevent spreading. It does not seed. It will not spread under a low hedge—a row of cow peas, even, will keep it from spreading, while they give a low dense shade. I have a row of Althea, also, one of what is called wild orange, both hedges, through neither of which has it grown these nine years.

I advise the utmost care. Though I have cultivated two crops of cotton and one of corn, upon rich low ground, where Bermuda was so thick that a mustard seed shot could not fall and miss a blade of the grass.

Brethren provide the best and cheapest food for your stock. And if upon due trial, and a fair calculation, you find any thing better for winter and summer than the above, in their places, no one will be more ready to adopt than your friend,

COLO.

Mississippi, Oct., 1851.

Walnut Leaves in the treatment of Disease.

Dr. Negrier, physician at Angiers, France, has published a statement of his success in the treatment of scrofulous disease, in different forms, by preparations of walnut leaves. He has tried the Walnut leaves for ten years, and out of 56 patients, afflicted in different forms, 31 were completely cured, and there were only four who appeared to obtain no advantage.

The infusion of the walnut tree leaves are made by cutting them and infusing about a good pinch between the thumb and fore-finger, in half a pint of boiling water, and then sweetening with sugar. To a grown person M. Negrier prescribed from two to three teacupful of this daily. This medicine is a slightly aromatic bitter—its efficacy is nearly uniform in scrofulous disorders, and it is stated never to have caused any unpleasant effects. It augments the activity of circulation and digestion, and to the functions imparts much energy. It is supposed to act upon the lymphatic system, as under its influence the muscles become firm, and the skin acquires a ruddier hue. Dry leaves may be used throughout the winter, but a syrup made of the green leaves is more aromatic. A salve made of a strong extract of the leaves mixed along with clean lard, and a few drops of the oil of bergamot is most excellent for sores. A strong decoction of the leaves is excellent for washing them.

The salutary effects of this medicine do not appear on a sudden, no visible effect may be noticed for 20 days, but perseverance in it, says M. Negrier, will certainly effect a cure.

As walnut-tree leaves are plenty and cheap enough in America, and as the extract of them is in no way dangerous nor unpleasant to use; and as scrofula cases are not uncommon, a trial of this simple medicine should be made. In di-

recting attention to it, good results may be expected. It is our opinion that every country has within its own borders those medicines best suited to the want of its inhabitants—to discover where and what these medicines are, should engage the attention of our physicians.

Prairie Farmer]

**"Sheep Husbandry in South Carolina—
Col. J. W. Watts' Flock."**

We take the subjoined remarks from the Newberry Sentinel. The editor has given one very good reason "Why it is that so little attention has been given to sheep raising in South Carolina." We can give him another almost, if not quite as good. It is the dog mania that prevails in our State, and which our political doctors are not disposed to take upon themselves the responsibility of remedying.

There are but few men in the State who feel disposed at once to go into the sheep raising business sufficiently extensive to justify them in employing the constant attention of a shepherd, and without one it would be madness to attempt it, especially with high priced sheep, the half or whole of which might be in one night killed by a gang of worthless curs. Out of a small flock of 35 head we lost in one night, in December last, 17 head by two dogs. We prescribed a dose of blue pill, which proved a preventive to future attacks, but it was no compensation for the loss of our 17 head of sheep. Such occurrences are by no means unfrequent, and no recourse can be had on the owners of the dogs, even if they could be identified. And yet, our legislators can enact no law to remedy the evil.—Here another mania presents itself—a mania for office—for high places—a mania that prevents men in office from acting independantly lest they should offend the "dear people."

If the members of our next Legislature will but venture on the experiment of laying a tax say as follows: Allow each family to keep one dog free of tax; on the second lay a tax of fifty cents; on the third, one dollar, and so on—doubling on each successive dog, we will venture our reputation as prophets that such a tax will sound the death knell of many a worse than worthless dog—and that within five years the present number of sheep will be doubled in our State.

By the last census it appears there are 51,739 families in the State. Now it is within the bounds of reason to suppose, that by such a law as above proposed, at least one dog would fall in each family, to wit: 51,739. Suppose again, that the place of each dog is supplied by a sheep, and that each sheep yields three pounds, only, of clean wool yearly, worth 25 cents per pound—here would be a clear income to the people of the State of \$40,304.50. We make no deduction for keeping a sheep, as it would cost no more than the keeping of a dog. Will our subscribers in the State get up petitions in every neighborhood to the next legislature to pass such a law? or will they prefer to keep and feed worthless and useless dogs, to prey upon themselves and their neighbors? We shall see.

We are pleased to hear, for the first time, that our friend and subscriber, Col. Watts, has em-

barked in the business of wool growing. Will he do us the favor to inform our readers of his success? We were asked by a friend, a few days since, where in the State a pair of young South Downs or Leicesters could be purchased, and at what price. Will the Col. do us the favor, if in his power, to answer the enquiry?

"The question has often occurred to us, why is it that so little attention has been given to sheep raising in South Carolina? The only reason that we have heard given, is that which has operated so powerfully in all the planting States against a diversity of production, viz:—the exclusive devotion of our people to the culture of cotton. This cotton mania, if it may be so termed, has already done much to impair our energies and means of producing. It is high time, that the size of our cotton fields should be reduced, if by so doing we will be enabled to retain within the limits of our State, the large sums of money which are annually sent abroad for articles of consumption which we can raise at home.—Why should our State be a market for the Horses, Mules, Bacon, and corn of other States? Why should we send abroad for our coarse cottons and woollens? It is only necessary for our people to take the matter in hand and direct a portion of their capital into the proper channels, in order to put an end to this dependance upon others for what our own industry can supply us with.

That the growing of wool would be a profitable business in some portions of our State we have not the least doubt. Our native stock of sheep are well adapted to the climate, and, neglected as they generally are, yield a fair fleece from two to five pounds. But our native stock may be improved upon by the introduction of new and improved breeds. The most experienced sheep raisers in our country are of opinion that neither the quantity nor quality of the fleece will deteriorate in our climate.

A few days ago we had the pleasure of seeing a beautiful flock at Spring Grove, Laurens District. The proprietor, our friend and *quondam* classmate, Col. J. W. Watts, has become convinced from the experiments which he has made, that he can grow wool more profitably than cotton. His flock contains near one hundred ewes of the Bakewell breed, and four ewes and two bucks of the pure Merino. The latter are from the flock of Col Henry S. Randall of Courtland, New York (author of letters on Sheep Husbandry at the South), one of the most intelligent and experienced wool growers in the United States. Three of them will be taken to North-western Georgia, by Dr. Wm. Anderson, who expects to remove thither in a short time.—These sheep (the Merinos), are an exceedingly hardy breed, and well adapted to this climate. They yield from four to eight pounds of wool, of superior quality, per annum. The Bakewell yield from six to ten pounds. They are a beautiful, highly formed, sheep—scarcely inferior to any for mutton.

The object of Col. Watts is wool-grow-

ing. We trust that he will meet with entire success in this laudable effort to demonstrate the practicability of sheep husbandry in this latitude, and thus influence others to follow his example.—His flock is a valuable acquisition to the community in which he lives. In a few years he will no doubt be able to furnish those who may be inclined to imitate his example, with some of his improved breeds."

Address to Farmers and Planters.

This is the eleventh Number of the second Volume of the FARMER AND PLANTER, and we design to get the twelfth out before the close of the year, so that we may, if sufficiently encouraged, commence the third volume with the new year. We have toiled heavily at the oar for two years, and incurred considerable expense to establish a respectable and useful paper devoted to the agricultural interests of the South, and whether successfully or not, it is not for us to say, but we can and are constrained to say with but the slightest compensation to ourselves. We feel under lasting obligations to our friends that have so liberally contributed, many of them to our columns as well as to our purse, towards sustaining our enterprise, but we know they are not of that class that would desire us to continue our efforts with less than a moderate compensation, and hence we have no fears of incurring their censure or displeasure in abandoning the publication of the FARMER AND PLANTER, if it is not better sustained than heretofore. To give ample time for consideration, we now lay the matter before our subscribers, the people of the State, and the South generally, to decide whether they wish a continuance of the Farmer and Planter or not. If they do, and will give it that support it needs, we shall be rejoiced, if otherwise, be it so. But the latter alternative we are loth to believe, and feel disposed to attribute the meagre support we have to impressions (though entirely erroneous) that seem to be general, that our subscription list is large and our support adequate.

A few years since, when it was said the Southern Cultivator must stop for want of patronage, we recollect (for we were one of its warmest supporters, and forwarded our own money for 30 copies) that propositions were sent in from S. Carolina, Georgia, Alabama, and Mississippi, by various persons not only to ensure its continuance, but to put it on a permanent footing. The efforts were successful; the paper sustained; and within the last year another spirited and able journal has sprung up in the same State, and has

nattering prospects. Shall it be said that South Carolina, with the *respectable assistance* she receives from other States, cannot or will not support a paper published for a single dollar a year, and furnished to clubs at a reduced price? Are there no JETHROS, RANDALLS, SPRUCEWELLS, POWERS, WARRENS, McDONALDS, &c., &c., to come to the rescue of the FARMER AND PLANTER?

As appears by the late census there are in round numbers in South Carolina 28,000 farms. Agriculture is the principal business of the State. It embodies the great mass of capital and wealth. It bears the burden of taxation. It supports the government in peace and in war. And what number of these 28,000 farms ought to be supplied with a journal devoted to this great interest? Does any one say 20,000—10,000—5,000—or 1,000? Will some one answer?

There are forty-six political and literary papers published in the State of South Carolina, and all, with an exception or two, well supported, and yet a *single* agricultural register, the one of all others it must be admitted of paramount importance to the planting and farming interest, cannot be sustained by that interest with the help of mechanics, merchants, lawyers, clergymen, and physicians in the State, and friends to the enterprise of all pursuits out of the State!

It is fair to ask how much the agricultural press has increased the value of the real and personal estate in the State, how much in Georgia, Alabama, and Mississippi, and draw the parallel between the increased value and the cost. Who will be kind enough to do it?

A husbandman who cultivated his fields only with the hoe was once asked, it is said, by a Scotchman, why he did not buy him a horse, and plow his lands instead of doing all with the hoe; oh, said he, shaking his head wisely, a horse costs a great deal of money, a great deal of money, sir; yes, said the Scotchman, but it costs a great deal more to do without him. So an agricultural paper may cost a great deal of money but it costs a great deal more to do without one.

We cannot believe, if we can succeed in bringing the matter to the consideration of those engaged in agricultural pursuits, they will suffer a paper given alone to their concerns to languish and die ignominiously, but have confidence that we shall be not only liberally but enthusiastically supported. Seventy-five cents or

a dollar from each farm or plantation would seem a small pittance for the advantage ultimately gained.

To the press generally we owe many thanks for the kind manner in which it has, from time to time, alluded to our humble efforts to advance the interests of agriculture. To contributors, the Farmer and Planter owes mainly whatever of ability may have characterized it, and that it has had no inconsiderable share we are authorized in saying from sources competent to judge, and above flattery or corruption.

To subscribers we would say we are conscious of our many deficiencies, imperfections and errors, and appreciate the lenity that has uniformly been shown us. To Post Masters we acknowledge the many favors we have received from them both official and personal.

We are not insensible to the kind offices we have received from all classes of society and should have some hesitancy in requesting any thing farther, did it not seem to us that we are all alike working, not for private emolument or individual gain (we think the facts of the last two years have proved this of us), but, for the common benefit of all pursuits. For least of all do we desire anything whatever for which we do not give a full and ample equivalent. If this is true, may we not ask that our present subscribers in their various localities will take in hand the matter of procuring subscribers, and even at the expense of some inconvenience solicit their neighbors to give their names to our old list, and thus save the only agricultural journal of this State from dissolution? If so, then can we make improvements which we wish, and look forward to the career of the Farmer and Planter as useful and prosperous.—We leave the issue to be made as suits the will of those concerned, and shall be gratified, should they decree for us (for we have had our heart in the success of the enterprise) but if otherwise, we shall try to be reconciled, with a becoming though not willing grace.

Barley---Enquiry.

HASKASSY. N. C., Oct. 30, 1851.

MESSRS. SEABORN & GILMAN:—Please to accept my thanks for the prompt and satisfactory reply to my communication contained in your favor of the 17th inst. I am so well pleased with your description of the Broyles' sub-soil plow, that I will thank you to have one made for me and send it to my address in Charleston, S. C., to the care of Charles Edmondston Esq. I would like to get it at an early

date as I wish to try it upon a piece of land which I will endeavor to break up this fall.

If my inquiry does not trouble you too greatly, you will oblige me very much by affording me such information as you may possess on the culture and management of barley as a grain crop, and its preparation for market. Have you ever tried barley and rye, when ripe, as pasturage for hogs, and will the beard of either injure them? I read with great interest the article on barley in your September number, and thought it of great value, but I have reference now to the grain when it is ripe, and the beard in its hardest state. Some persons contend that it is necessary to wait until the beard of barley and rye is partially rotted, before it is safe to turn hogs upon it, but if this is so, then the advantage [of barley over the other grains in ripening earliest, is all lost. Besides, I think the practice of the western graziers has been quite different, and they, I am inclined to think, turn their hogs upon the rye field as soon as the grain is ripe. I will thank you for information on these points, and your experience, if you have any. If not experimentally informed upon the subject, can you furnish me with the address of some gentleman who is, and who would be likely to give me the desired information.

The money for the plow will be paid in Charleston or sent on to you by mail as you may prefer and direct.

Enclosed I send you a stamp to prepay any communication you may kindly furnish me with.

I remain, very respectfully, yours,
P. M. E.

The above was received just in time to get insertion, but without space or time for us to give a satisfactory answer. We shall with pleasure give our views and experience upon the points of enquiry in our next. In the meantime we invite others whose experience may be more full and satisfactory than our own, to give the desired information through the Farmer and Planter. The order has been filled by the manufacturers and the plow is *in transitu*.—Eds.

Why not be Independant?

MESSRS. EDITORS:—You write me Mr. Calhoun told you who "Colo" was! Well be it so, I can pardon such, from such a man. He was the man, above all men, in my humble esteem. He gave himself to his country. And though he was what few men can be, learned in all matters, yet he was not reluctant to take lessons from one so infinitely his inferior, and one so much below him in intellect and knowledge, as is Colo. I suppose he deemed the information to you could be made advantageous, and therefore I feel grateful to his memory. His last letter to me, not long before he left home for Washington, is prized, and shall descend as an heirloom. Others may ridicule—I admire the man. Not because he was talented and learned, only, but that

he was willing to use both for his country, even unto the end of life. May his children and our countrymen take example therefrom.

"I know myself unworthy to be your monitor; but a monitor you must have: and it is better to hear of our sin and our duty from any body, than not at all." So wrote the great Richard Baxter, long since, upon spiritual matters, and so I adopt his words, as to our duty as agriculturists. There are not many who know "Colo," and I now wish they were fewer, not that I am fearful of responsibility, but that I wish the thoughts given from time to time, may have all due influence, without any drawback from the writer.

At times I feel indeed as if I had faltered in duty. I feel as if I had been exceedingly remiss. To think one who has labored so long, and yet done so little! The fault is not in the reader but in the writer, I fear. Why should not I—aye even poor I, use my talent, nay, our talent, in arousing my dear friends and brethren in doing their duty as citizens? Shall I fear to be called names? I have tried, but I will again and again try, and it may be, that though an humble countryman, without talents, family influence, wealth, education, or ought to recommend, may yet arouse his brethren to a sense of their error.

It may be that the good people of South Carolina may hear one born in their midst—whose father is now a part of their soil; whose brothers and sisters were all born in their midst—a part buried among them; whose wife and all his family were there born, therefore allied by every tie.

And now brethren, allow "Colo," your own "Colo," to ask why will you be bound longer, to those who are sucking your very life's blood? For this century, at least, you have been dependant far too much for your bread, meat, clothes, tools—and all else save cotton and rice, upon strangers. Why should you try it longer?—You certainly can grow all that is needful for sustenance, and suppose you sell a bale or two of cotton less—will you be the losers or gainers? It is true that Alabama, Mississippi, Louisiana and Texas, will continue in the old and beaten track, yet if they will go the down-hill path, why should you?

But I contend the way to make property is the way I wish to allude to—which is not to make cotton and nothing else. And to show my faith by my works, allow me here to refer to my crop. I give the relative portions, showing equally as well: In cotton 13, acres; in corn, 12; in oats, 3; in potatoes, 1; in pindars, half acre; grass, for mowing (Millet grass and Egyptian Millet), half acre, and the oat land planted in corn and peas after the oats are garnered. Thus, you see, I have in cotton thirteen thirty-thirds, in all else, as a provision crop—say twenty thirty-thirds. I have now a colt to every three hands, and a brood mare to every two and a half hands. I can kill two and a half hogs per hand, or over a hog to every human here. Sheep, three to a hand; cattle nearly two to every thing; work horses one to each hand (including brood mares and Sunday horses—for everything works here, except the mistress, we allow her, she being quite delicate, to be mas'er).

Of the management and control, or anything

pertaining to such, "Colo" will with joy give to you at any time. Only let him be as unknown as possible—do improve thereon, that our country may be blessed. Brethren, we are in trying times. Let us, one and all, be true to our country, and though our career may be short, it will not be fruitless. From our ashes will rise up men to the work, and Carolina will, she must, take and retain her proper place, where our hard working and hard fighting fathers placed her.

Be not run off with dress, show, or glitter.—Dismiss all supernumeraries. Follow your own hands. Manure your lands, even by the sweat of your own brow. Plow deep, and give fine tilth. Make bread even for the stranger. Provide well for all in your charge, and then devote all other time and labor to making cotton—always bearing in mind, that the soul, the mind and the body, deserve culture first.

It may be that "Colo" has penned, over another signature, the very information you may demand, if so, you need not be surprised that he seems to borrow from others, a thing he has tried all his life to avoid, without giving credit; so, where he does not use the double commas, you need not take for granted that he is the same man who wrote similar—as he, Colo, may, perchance, from his reading have imbibed those thoughts. Yours, in love, COLO.

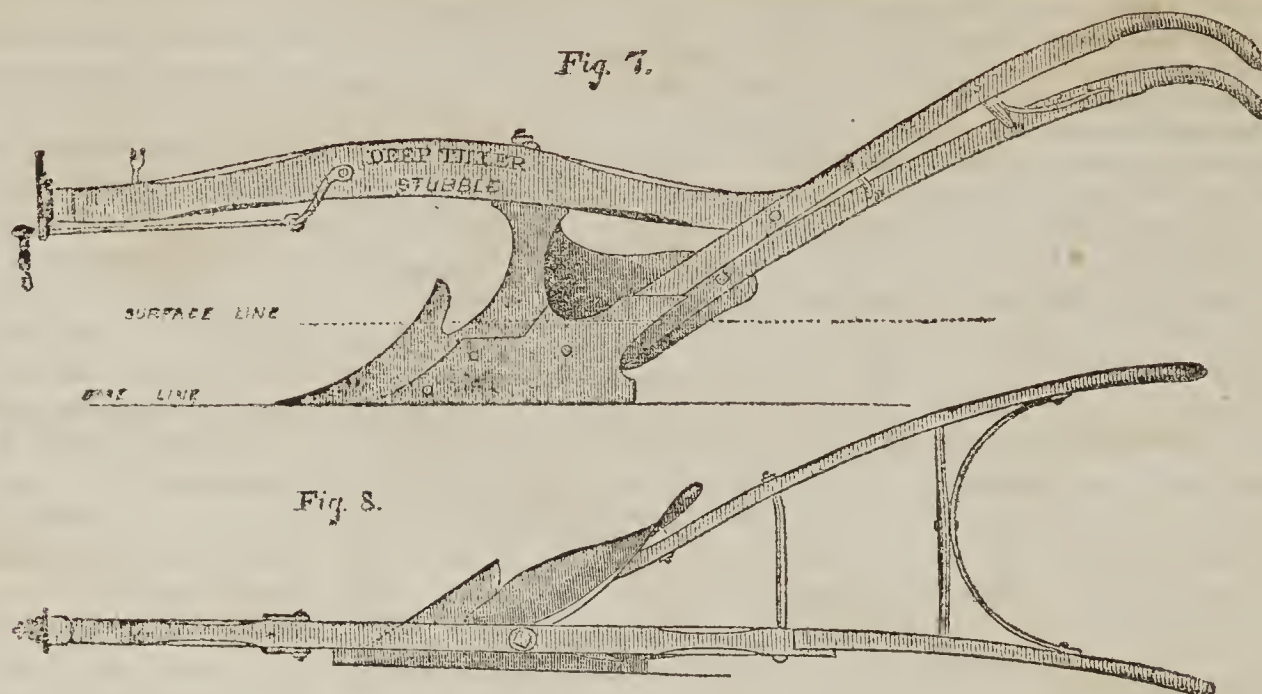
Our Exchanges.

THE FARMER & PLANTER.—The November number is received. It is filled with matter of more than usual interest. The editors, Messrs. SEABORN & GILMAN, are gentlemen of talent, and well versed both in the theory and practice of agriculture. Their work is eminently deserving of public patronage, and they seem to be sparing of no effort to make their monthly equal to the best. Some of the papers have suggested that it would be to their interest to publish in Columbia or Charleston. We don't think so.—Agriculture emphatically belongs to the country, and has nothing to do with cities any way. They can publish cheaper at Pendleton, theirs is not a newspaper, and their pages can therefore be as well and better filled in the country, than in the city. We hope that a really valuable work may not be prejudiced by a difference of opinion as to the place of its publication, of which the Publishers at last must be the best judges.—*Ander-son Gazette*.

Our friends, the editors of the Gazette, have our thanks for the above remarks on the Farmer and Planter, and we assure them, with all due deference to the opinions of others, that the paper *never* will be published in either Columbia or Charleston by us; nor can we see how others can arrive at the conclusion that it would be either to the interest of publishers or a very great majority of its readers to publish an agricultural paper in a city instead of a country village, in the midst of those that contribute most liberally to its support. We receive our exchanges from every section of the country as regularly at Pendleton as we could possibly do in either of the above named cities, and we venture the assertion that not one of our able corps of correspondents would have done more

for the paper there than here. Our columns have at all times been open to communications from all parts of the cotton growing region, and every number yet issued has contained original contributions from planters of the lower country of this State. Mississippi has been very often represented by her best practical cotton makers. Few numbers have been published in which she has not taken a part. Georgia and Alabama have occupied a respectable position. We have always been gratified with this, and should have been better pleased if we had received communications in greater numbers, and would have published them even at the expense of enlarging our journal. It is not by any means our object to make the Farmer and Planter a provincial sheet. It is for the South, and designed as the vehicle of communication among the cotton and rice growers of the Southern States. So far, then, as contributions are concerned we do not see how a change of place of publication could improve the paper or benefit the publishers. As to our own feeble productions, we do not suppose the breathing of a city atmosphere would inspire us to do better than we can on our own farms. As our friends very truly say, agriculture emphatically belongs to the country; the country is the natural place of birth and habitation of an agricultural paper, and to the country must it look for its support, if supported at all. It has been but a few years since an agricultural paper went down in each of the above named cities for want of support, and really, judging from the amount of patronage we have received from them, we are not surprised at it. Our readers will no doubt be surprised to understand, that with the exception of the three excellent exchanges, the daily and weekly Carolinians, and Temperance Advocate, we send to the Columbia post office six papers only!! And with the exception of one sent to our other valuable exchange, the Mercury, we send to gentlemen LIVING in Charleston (we suppose, though we are not quite sure they all do) but ten papers!! Now there is scarcely a village in the State that does not send to us more subscribers than either of these cities, and there are villages in Mississippi, Alabama, and Georgia, to which we send thirty and forty copies.

If gentlemen want an agricultural paper either in Charleston or Columbia, let them publish it, for we can assure them unless ours is better supported than it has hitherto been, we shall not long be in their way.



RUGGLES, NOURSE, MASON & Co.'s STUBBLE PLOW, No. 37.

Plows and Plowing.

(CONTINUED FROM PAGE 154.)

Fig. 7 represents a land side elevation, and fig. 8 a plan of stubble plow, No. 37. There is a larger size, No. 38, adapted to deeper work than the plow here represented. The surface line, fig. 7 shows the position of this plow in a seven inch furrow. The handles are of a good length, though shorter than those of the No. 72 plow; the beam is high and arching, it is mounted with a short draft rod and a dial clevis, adapted to give the plow a wide range, both *landing* and *earthing*. The perpendicular height from the base line to the underside of the beam, immediately forward of the standard, is 17 inches, which enables the plow to make its way among rank stubble, corn stalks, &c., without choking. The fin cutter is an excellent point in this plow. By making an easy, clean cut from the land, the furrow is not encumbered with clods of earth rolling down from the land side as they are apt to do where the furrow is torn from the land by the plow.—The fin cutter also lightens the draught of the plow. Fig 8 shows the form of the mould board, the position of the beam over it, and the position of the land side.

Fig 8 is a pretty good representation of the work of this plow in stubble or old land. It is noticeable that the furrows are nicely laid for the reception of the seed grain; that the furrow slice is all taken up and forced over to an inverted position and there it stays: and that the furrow channel is entirely cleaned out for the reception of the next furrow. It is impossible, however, to represent these practical matters exactly on paper; we can only represent them generally. Fig 10 represents the work of an approved sward plow, in stubble furrows. It is not broad and full enough at the heel to clean out the furrow channel. Then, too, after the furrow slice has reached a perpendicular position, there is not force enough in the mould board to compel the slice to grow over to its proper place, and as there is not cohesion enough in the slice to hold it together, a portion rolls one way, and

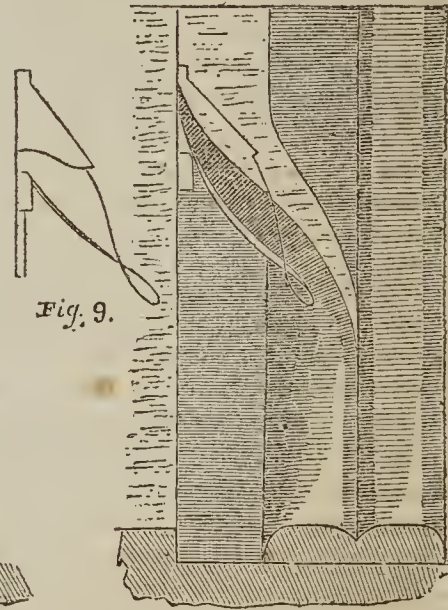
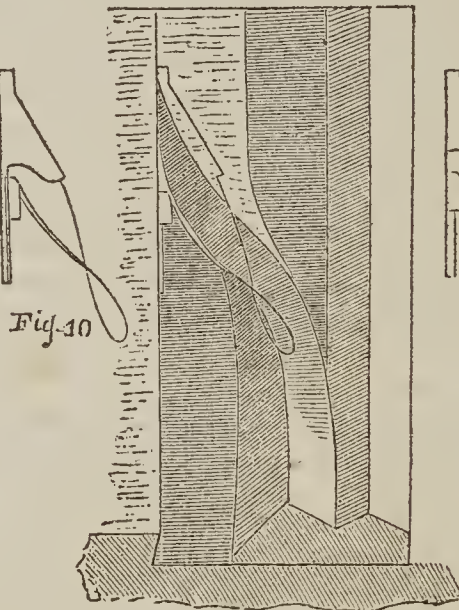
a portion the other. The centre of the furrow channel is half filled up, and the work generally will not compare with that done by the stubble plow No. 37. The stubble plow No. 37, would not make nice work in sward furrows; it would break them too much.

Fig 11 represents an elevation, and fig. 12 a plan of the new sward plow for moist adhesive soils. There is another size for furrows nine inches deep, of the same general form and proportions with the one here represented.

The handles, fig. 11 are long and raking, the beam is high, giving a space of 17 inches forward of the coulter, and the plow is mounted with a Scotch clevis, the adjustment for *earthing* being represented in fig. 11, and the *landing* in fig. 12. The general outline of the mould board is very well represented in fig. 12.—The share is narrow, the wedge power great, and the back

part of the mould board is adapted to place the furrow slice exactly at an angle of 45° before leaving it. The land side is perpendicular, and the coulter stands in a range with it.

In considering the form and proportions of a plow best adapted to the working of stiff heavy soils, Messrs. R., N., M. & Co. have thought that plow the best, that will cut a perfectly rectangular furrow, whose depth is to its width as two is to three, and lay it at angle of 45° . The plows for stiff lands, that they now offer the public, are adapted to work as above specified. They combine the best working properties of the celebrated Scotch plow invented by Small, with the lightness and cheapness of the American plow. The lines of the scale from which these mould boards are fashioned, give them a slight convexity of surface, which is considered an advantage in the working of tenacious, unyielding soils; but the lines may be varied to straight lines for medium soils, or to concave lines for light, sandy soils.—The line of transit for the upper edge of the furrow slice, is adapted to the delivery of the slice with an unbroken crest. The mould board pre-



sents a uniform resistance to the furrow slice, and will brighten uniformly over the entire surface, however tenacious the soil may be.

Fig. 13 represents the action of this plow in furrows seven inches deep by ten inches wide. The plow enters the ground very easily, a good hinge is preserved upon which to raise the furrow slice to its perpendicular position, the back part of the mould board lays the slice at an angle of 45° before leaving it, and the two exposed faces of the slice are of equal breadth, namely, seven inches.

Fig. 14 represents the action of a plow unadapted to laying proper lapped furrows. The plow is so wide upon the bottom as to require a width of furrow slice of at least twelve inches, and yet it cannot go more than seven inches deep—indeed, it can hardly do that, without crowding over to the left, or land badly, and it cramps and breaks the slice very much. But the slices are of unequal proportions. The width is too much for the depth, and, consequently, so flat a surface is formed, that if the furrows are to lie exposed for some time to the weather, and

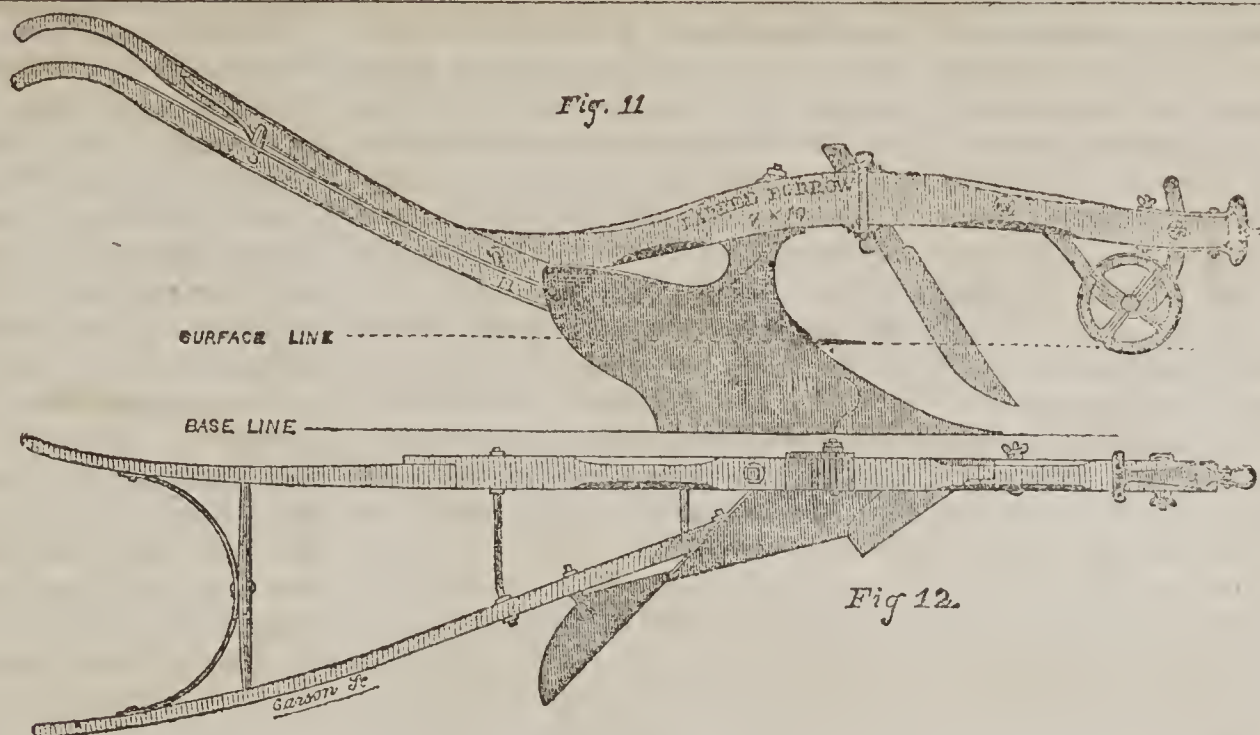
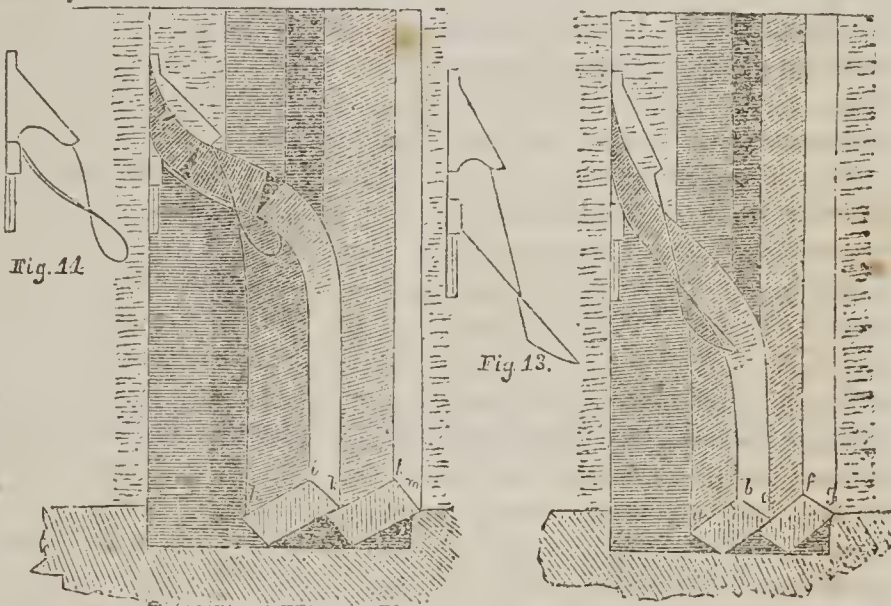


Fig. 11
Fig. 12
PLOW FOR LAPPED FURROWS—FURROWS 7 BY 11.

if the soil be adhesive clay, it will run together and bake so much as to render the harrow quite inoperative, and but a shallow seed bed will be raised. The spaces underneath the furrows are wide and low, and they will be apt to fill with soil, which will prevent a proper circulation of air, and a free passage of superfluous moisture, and the surface will be apt to be wet and heavy.

The triangles, *abc*, *efg*, fig. 13, are of equal sides, and the angles, *b*, *f*, are angles of 45° . The triangles, *hik*, *klm*, fig. 14 are of unequal sides, and the angles, *i*, *k*, are angles of 36° . If we suppose a series of sections of these 7 by 10 and 7 by 12 furrow slices, each extended to ten rods, for instance, in width, and that they are one inch thick, we shall find upon a calculation of the aggregate exposed surface of each, that the furrow sections, 7 by 10 of equal faces, have exposed 2,891 inches of surface to the air, while the sections 7 by 12 of unequal faces have exposed but 2,722 inches; and any one who chooses to extend the calculation and comparison to an acre of ground, will find the balance to be very much in favor of the slices represented in fig. 13. A like comparison of rectangular furrow slices, whose depth is to their width as two is to three, and which are laid at an inclination of 45° , with furrow slices of any other form, or proportions, that are practicable to be laid, will be found to result in favor of those first named; indeed, it can be shown that no furrow slices but rectangular ones, whose depth is equal to two thirds their width, can be laid at an inclination of 45° ; and since it can be proved that rectangular furrow slices, whose depth is equal to two thirds their width, and which are laid at 45° , present the greatest surface to the ameliorating action of the atmosphere; and since it can also be proved that such furrow slices present in their projecting angles the greatest cubical contents of soil for the harrow to operate on, in raising a fine, deep tilth, or seed bed, and, that such furrow slices have the best spaces for the circulation of air, and the passage of water underneath them, we may conclude that all plows, for laying lapped furrows in heavy adhesive soils, are absolutely faulty in just so far as they fail to cut rectangular furrows, whose depth is to their width as two is to three, and lay them at an inclination of 45° . I would give unerring mathematical demonstration of these points, were it not that I should be extending an article already too long."



We are indebted to the Warehouse of A. B. Allen & Co., New York, for the above cuts.

F. HOLBROOK.

Successful Corn Planting.

MESSRS. EDITORS:—While I was spending the past summer at Glenn Springs I had the pleasure of the acquaintance of Col. Kern and Capt. Williams of Walterborough, who informed me that Mr. Burrell Saunders of that parish had, by his skill and attention to agriculture, astonished the planters in that part of the State; they informed me that Mr. Saunders came to that neighborhood as an overseer from Barnwell district, and by industry and economy made a sufficiency to purchase some hands and a plantation. He was told by a respectable citizen that he could not succeed in planting, as the former owner of the plantation had failed to do so, and had to leave the place. Mr. Saunders commenced a system of

manuring and rest, and soon convinced his neighbors that there was as much in the management of the man, as there is in the production of the land. His corn crop the first year or two, was from 15 to 20 bushels per acre. Afterwards it increased from 20 to 30, and in a few years he raised 40 bushels to the acre.—This was doubted by some of the citizens of Walterboro, and a bet was made and the parties went down to Mr. Saunderson's plantation and measured his cribs, and it was ascertained that he had exceeded 40 bushels per acre. Shortly after I received this information from Col. Kern and Capt. Williams, Mr. Saunders arrived at the Springs, and I availed myself of the first opportunity to make his acquaintance and enquire particularly in-

to his mode of culture. I found him a modest, unassuming gentleman, with good sound practical sense and willing to communicate his plan of planting and cultivation of corn, which I will give in detail, but will state another fact related by the gentleman named above, which will astonish many, viz: Mr. Saunderson's present crop of corn will average 60 bushels per acre the present year, and that acres can be selected that will make 100 bushels per acre.

Mr. Saunders informed me that his plantation was very level, with a clay sub-soil, that he had ditched it thoroughly, so that an excess of rain falling would be carried off by the ditches, that he had also dug up the stumps and roots in his corn land, and that he planted corn on

the same land every year. He lays off his rows with stakes $4\frac{1}{2}$ feet wide and made them as straight as possible and all of the same width; that his preparation commenced in February by running a deep furrow in the alley or between the old beds, in that furrow he listed his corn stalks, pea vines and all vegetable matter, (having previously cut down his corn stalks and cut them up in 2 or 3 pieces,) he then deposits his manure in the drill, after which he takes a turning plow (Freborn's No. 10) and runs a furrow on each side, covering up the manure and corn stalks. It remains in this situation until he is ready for planting, which he begins early in March. He then opens the list with the corner of the hoe, (having previously fixed them as straight on the helve as possible,) from one to two feet apart, according to the strength of the land, and then drops his corn in the chop, having previously rubbed it in coal tar and soot. He then takes the turning plow and runs a furrow on each side, taking dirt from the bed to cover the corn. It remains in this situation until it is sprouted about two inches long. He then runs a block that is wide enough to scrape two rows at a time; the block is hollowed in the middle to pass over the old bed and has shafts so that the horse walks between the rows. This operation leaves the list lower than the old bed and the corn remains in this condition until it is three or four inches high. He then runs round it with the turning plow as close and as shallow as possible, and even if it should fall down, it is not injured if it only has one or two roots, the corn grows equal to the other around it. It remains in this condition eight or ten days, and he then runs close to it with the mould board next to the corn, lapping the earth perfectly around it, so that the grass is all covered. He then lets it remain eight or ten days longer and then runs round it again, taking only half slice from the old bed and making the horse walk briskly, which will throw the dirt to the corn again. He then takes cotton seed that has not been killed by heating and he drills in the furrow at the rates of 16 bushels per acre, (one furrow to each row,) and then covers them with a block or board and they remain until they have sprouted and in the act of coming up. He then takes a turning plow a size larger and runs round again, still taking only half slice and throwing the dirt as near the corn as possible and covering up the seed, which prevents them

from coming up. The corn remains in this condition eight or ten days longer and the bed is finished out by running two more furrows, and then a shovel furrow in the middle as deep as possible, which completes the plowing. He usually plants peas about the first of July, between the hills of the corn with hoes, and works them after he pulls the fodder, with the hoe also. Mr. Saunders informed me that he was compelled this year to break the middle, as he found it would get too hard, but usually does not plow his corn but once, and scarcely ever hoes it. Mr. Saunders works 55 hands, large and small, he cultivates 64 acres in corn and 30 acres in potatoes, he also plants 4 acres of long staple cotton to the hand, and some rice for market, and has sold 1200 bushels of corn the present year, and some bacon, and what is more astonishing to me, he only runs six plows, which I consider is one of the most important secrets for us to learn.— He rests his cotton land every other year, his rows are $4\frac{1}{2}$ feet wide, and in the summer he hauls in leaves and lists them in the alley, only taking dirt from the edge to cover them, and then in the winter, lists in the weeds and vegetable matter and draws up with the hoe; he cultivates his cotton mostly with the hoe.— His average crop is 3 bales of long staple cotton to the hand. I propose in a future number to make a few suggestions on Mr. Saunderson's system, applicable to the up country.

I am yours, T. B. BYRD.

Greenwood, S. C. Oct. 15, 1851.

Management of Negroes.

Your number for June contains an article upon this subject, and whilst I agree with the writer in the main, I have also some notions of my own, which you are at liberty to use.

The public may desire to know the age of the writer, the length of time he has been engaged in managing negroes, and how long he has tried the mode of management he recommends. It is sufficient to say, I have had control of negroes in and out of the field for thirty years, and have been carrying out my present system, and improving it gradually, for twenty years.

I do not deem it necessary to follow "a planter," nor shall I strike a blow at book farming or theories, as I am an advocate for both, believing that even an error has its advantages, as it will frequently elicit inquiry and a good article in reply, whereas a statement of facts will sometimes pass unnoticed.

Housing for negroes should be good each family should have a house, 16 or 18 feet in the clear, plank floor, brick chimney, shingle roof; floor elevated 2 feet above the earth. There should be no loft, no place to stow away anything, but pins to hang clothes upon. Each house should be provided with a bedstead, cotton mattress, and sufficient bed-clothes for comfort for the heads of the family, and also for the young ones.

Clothing should be sufficient, but of no set quantity, as all will use, or waste, what is given, and many be no better clad with four suits than others with two. I know families that never give more than two suits, and their servants are always neater than others with even four.

My rule is, to give for winter a linsey suit, one shirt of the best toweling, one hat, one pair of shoes, a good blanket, costing \$2 to \$2 50, every other year, (or I prefer, after trying three years, a comfort.) In the summer, two shirts, two pair pants, and one straw hat. Several of my negroes will require two pair pants for winter, and occasionally even a third pair, depending mostly upon the material. Others require another shirt and a third pair of pants for summer. I seldom give two pair of shoes.

Food is cooked by a woman, who has the children under her charge. I do not regard it as good economy, to say nothing of any feeling, to require negroes to do any cooking after their day's labor is over.

The food is given out daily, a half pound to each hand that goes to the field, large and small, water carriers and all; bread and vegetables without stint, the latter prepared in my own garden, and dealt out to the best advantage, endeavoring to have something every day in the year. I think four pounds of clear meat is too much. I have negroes here that have had only a half a pound each for twenty years, and they bid fair to outlive their master, who occasionally forgets his duty, and will be a gourmand.— I practise on the plan, that all of us would better be restrained, and that health is better subserved by not over-eating.

My cook would make cotton enough to give the extra one pound. The labor in making vegetables would make another pound. I say this to show I do not dole out a half a pound per day from parsimony.

My hours of labor, commencing with

pitching my crop, is from daylight until 12 M.; all hands then come in and remain until 2 o'clock, P. M., then back to the field until dark. Some time in May we prolong the rest three hours; and if a very hot day, even four hours. Breakfast is eaten in the field, half an hour to an hour being given; or they eat and go to work without being driven in and out—all stopping when my driver is ready.

I give all females half of every saturday to wash and clean up, my cook washing for the young men and boys through the week. The cabins are scoured once a week, swept out every day, and beds made up at noon in summer, by daylight in winter. In the winter, breakfast is eaten before going to work, and dinner is carried out to the hands.

I do not punish often, but I seldom let an offence pass, making a lumping settlement, and then correct for the servant's remembrance. I find it better to whip very little. Young ones being very treacherous in their memory, pulling an ear, or a sound box, will bring everything right. I am almost afraid I will subject myself to the "chimney corner theorist's" animadversion, if I say more, but I will risk it. Put up a hewed log-house, with a good substantial door, lock and key, story 12 feet high, logs across above, so as to make a regular built jail. Have air holes near the ceiling well protected by iron bars. The first negro that steals, or runs away, or fights, or who is hard to manage in order to get a day's work, must be locked up every night as soon as he comes in from work, and turned out next morning; kept up every Sunday. Negroes are gregarious; they dread solitariness, and to be deprived from the little weekly dances and chit-chat. They will work to death rather than be shut up. I know the advantage, though I have no jail, my house being a similar one, yet used for other purposes.

I have a fiddle in my quarters, and though some of my good old brethren in the church would think hard of me, yet I allow dancing; ay, I buy the fiddle and encourage it, by giving the boys occasionally a big supper.

I have no overseer, and do not manage so scientifically as those who are able to lay down rules; yet I endeavor to manage so that myself, family and negroes may take pleasure and delight in our relations.

It is not possible in my usual crude way to give my whole plans, but enough

is probably said. I permit no night-work, except feeding stock and weighing cotton. No work of any kind at noon, unless to clean out cabins, and bathe the children when nursing, not even washing their clothes.

I require every servant to be present each Sabbath morning and Sabbath evening at family prayers. In the evening the master or sometimes a visitor, if a professor, expounds the chapter read. Thus my servants hear 100 to 200 chapters read every year anyhow. One of my servants, a professor, is sometimes called on to close our exercises with a prayer.

Owning but few slaves, I am probably able to do a better part by them than if there was one or two hundred. But I think I could do better if I had enough to permit me to systematize better.

I would keep a cook and a nurse. I would keep a stock feeder, whose whole duty should be to attend to stock in general, to clean out the stable, have troughs filled with food, so that the plough hands would have nothing to do but water, clean down, and tie up the teams.—I would build a house large enough, and use it for a dance-house for the young, and those who wished to dance, as well as for prayer meetings, and church on Sunday—making it a rule to be present myself occasionally at both, and my overseer always. I know the rebuke in store about dancing, but I cannot help it. I believe negroes will be better disposed this way than any other. I would employ a preacher for every Sabbath. One of my negroes can read the Bible, and he has prayer-meeting every Sabbath at 4 o'clock, P. M.—all the negroes attend regularly, no compulsion being used.

I have tried faithfully to break up immorality. I have not known an oath to be sworn in a long time. I know of no quarrelling, no calling harsh names, and but little stealing. "Habits of amalgamation" I cannot stop; I can check it, but only in the name. I am willing to be taught, for I have tried every thing I know. Yours, truly,

A SMALL FARMER.

P. S.—I endeavor to have regularity on going to bed; forbid sitting or lying by the fire after bed time. I require fire makers to be up before day in winter, but forbid getting up before day, trotting off to the field and waiting for daylight, as some persons are said to do. I forbid my driver from keeping hands in the field when there is an appearance of rain.

My negroes get baits of fresh meat occasionally, but always highly seasoned with red pepper. At times I give molasses, sugar, coffee and flour, generally laying out about \$10 per hand for such luxuries.—*De Bow's Review*.

Indian Corn.

A RESPECTED subscriber in Georgia, some time since, requested us to give in some of our future numbers, a history of Indian Corn. Also something on the Irish potato, and of the wild turkey, all of which he believed to be indigenous to our own country, (America.) Although we have been tardy in fulfilling our promise to comply with his request, yet we have not forgotten it, and again say to him, that all shall be attended to in due time. And for a beginning, we give him extracts from "An Essay on the History and Importance of Indian Corn as an Agricultural Product—By Charles Louis Flint," published in the Transactions of the New York State Agricultural Society, Vol. ix., 1849.

"The complete history of Indian corn seems never to have been written by an American. The materials for it must be sought in old and uninviting volumes, in the narratives of voyages and travels, and in no less than five or six different languages. The skilful labor required to bring together the various conflicting accounts, is by no means small. The writer who would undertake such a task, should possess much knowledge of the botany of the western continent, as well as that of Asia and the Asiatic isles, to be able to draw the most natural and correct conclusions of his own. He who shall do it, as it should be done, will render a great service to American agriculture.

In France, Parmentier published a work on maize, in 1785. This was soon followed by that of Harasti, in Italy, devoted to the practical details of the subject, in 1788. In Germany, Burger, published a work on the Natural History and Culture of Maize, in 1809. Still more recently, the labors of Bonafous, in France have thrown much light and interest on the same subject. In Spain, though no very valuable work has appeared on the history of maize, such frequent allusions are made to it in the narratives of the voyages of Columbus, Alonzo Negro. Penzon, Vespucci, and Cortez, as to be of great service in determining its native country. The works of Oviedo and Hermandes, also, are worthy of mention.—Still more important is the authority of Humboldt.

The word *zea*, which is applied to maize, is derived from a Greek word which signifies to *live*; and the reason of

its application is the great amount of nutritive matter which the plant contains. Of all the species of gramina, the *zea mais* is probably the most cultivated. It is annual; and the stems, which are cylindrical, and closed at the nodes, rise to the height of from four to ten feet. The sheaths of the leaves are split, the flowers are in double rowed imbricated bracts, the male flower being placed at the apex of the stem. Each grain is furnished with a style, which extends along the inner side of the sheaths, and hangs like a fine silken thread, forming the tassel.—The stamens are three; the seeds are rounded on the surface, compressed at the sides, and arranged in rows. They are extremely farinaceous, or mealy, which gives the plant its value. The varieties are innumerable. These varieties are owing, in part, to difference of culture, climate, and soil. Of these we shall speak more at length hereafter.

Naturalists have long disputed the origin of maize. The question is one of interest, inasmuch as some claim our own as its native country, while others contend that it came from the East. It is proper to state, briefly, the argument as it stands, after which we shall be better able to draw somewhat satisfactory conclusions."

Mr. Flint here goes on to give the names of a number of writers and a large amount of evidence in favor of its Eastern origin, and says:

"After this accumulation of evidence in favor of its Eastern origin, it is worthy of remark that some have even asserted that it was known to the ancient Greeks and Romans. But such conjectures as that the black millet brought from India to Italy, in the time of Pliny, was the maize, are probably ill founded."

He next proceeds to enumerate the authors on the other side of the question—those who believe maize to be indigenous to America—and concludes this part of his subject as follows:

"It remains to speak of the important conclusions of Baron Humboldt. "It is no longer doubted," says this learned naturalist, in his *Essays on New Spain*, "it is no longer doubted among botanists, that maize, or Turkey corn, is a true American grain, and that the old continent received it from the new." Again, he says: "On the discovery of America by the Europeans, the *zea maize* (*tlacalli* in the Aztec language, *makiz* in the Haitian) was cultivated from the most southern part of Chili to Pennsylvania,"—Massachusetts, he might have said, for such was the case. "According to a

tradition of the Aztec people, the Toultees, in the seventh century of our era, were the first who introduced into Mexico the cultivation of maize, cotton and pimento. It might happen, however, that these different branches of agriculture existed before the Toultees, and that this nation, the great civilization of which has been celebrated by historians, merely extended them successfully.—Hernandez informs us, that the Otemites even, who were only a wandering and barbarous people, planted maize."—Thus we see it was cultivated in America before its discovery, and formed a most important article of food for centuries.

Having candidly stated the various authorities on this question, we are now prepared to proceed in our investigation, And first, let us say, that though we should consider it no small gift of the new world to the old, it is not difficult, on a question which does not affect either personal or national honor to free our minds from prejudice and partiality, and study with a desire to ascertain and establish the truth. We are not convinced by the assertions of some or by the arguments of Bonfous and others, to prove that maize originated in the East. They have not made out a satisfactory case. It should be borne in mind that the authority of the early writers is not always to be relied upon. They possessed none of the advantages which modern science has laid open, to pursue their investigations. They could not be accurate on questions of this nature. It is very probable that maize came into Europe by way of Turkey and the Levant, which gave it the name which it then bore, of Turkish wheat, &c., and which would be likely to deceive a naturalist of the sixteenth century, in regard to its origin. Then it is very easy to conceive how a careless statement made by a writer three hundred years ago, would be taken on his authority, and thus gain a credit which it did not deserve. Instances of this occur on almost every page of the old historical writers, as any one who is at all familiar with the works of Sir Thomas Moore and the old chronicles, can testify.

It is a remarkable fact that maize is not mentioned by travellers who visited Asia and Africa previous to the discovery of America. These travellers to foreign parts were often very minute in their descriptions of the productions of the soil. But the maize was never described

in Europe until after the discovery.—This, most certainly argues very strongly that it was not known.

It is also a remarkable fact that it was universally cultivated on the western continent at the time when the Europeans landed here. This is proved by P. Martyr, Ercilla, Jean de Lery, not to mention Torquemada, and others, who tell us that the first Europeans who set foot on the new world saw among other wonders a gigantic wheat with long stalks, and that this wonderful wheat was the maize. The harvesting of it was celebrated by the people with religious festivals. Sacrifices were prepared with it. With it the Mexicans formed idols. It constituted almost the only food for all the tribes of Mexico, in Peru, in Brazil, at the Orinoco and the Antilles. It served for money. A theft of seven ears the Mexican laws punished with death.

It is a still more curious fact that immediately after its introduction into Europe, it spread with great rapidity into every country and province where the climate was thought to be suited to it.—Now if it had been known in Asia, if it had been cultivated by the Turks, how could these things have happened? Why was not so useful a grain introduced into Europe before, or why did it spread so rapidly when it was introduced? A somewhat extensive trade was carried on between Europe and some of the Asiatic isles long before the sixteenth century, so that if Indian corn had been known or cultivated in Asia, there is every probability that it would have found its way into Europe. The plant called *saughum* was known and cultivated in Europe and somewhat in Asia and Africa, and this it was with which maize so often was confounded. This, however, was not a species of Indian corn.

But the strongest evidence of its American origin is, it seems to us, that it has been found growing wild in some parts of the western continent, which is not the case in any other part of the world. We need say nothing of the fact that grains of corn have been found in the mounds of Peru. These mounds were probably built three or four hundred years before the conquest. There can be no doubt therefore that it was cultivated on this continent from time immemorial.

But it may now be asked, how are we to explain the numerous allusions to a grain, which, if not Indian corn, must

have nearly resembled it? We have already remarked that many of the assertions of the early botanists confounded maize with sorghum. Other allusions, and those by the sacred writers, refer to wheat, which was indigenous to Asia, and almost universally cultivated. Mr. St. John admits that there was, and still is, in that part of the world, "a very large grained wheat called camel's tooth," which would naturally have given rise to the expression, "ears of corn," so often used. The misconceptions of Mr. Cobbett and others in regard to these references, arise from ignorance of the ancient mode of sowing wheat, or corn, as it was universally called by the old writers. Large fields of it were sown, between which a narrow road or path was left for the public. This road was just wide enough for the carriage to pass without injury to the grain, there being no fences for protection, so that it might literally be called "going through the cornfields." It was sometimes gathered with the sickle, sometimes, by passing through it and plucking off the heads or ears, the reaper having an apron or pouch to drop them into.

Neither wheat nor rice were known to the first inhabitants of America, and we may with as much truth say that Indian corn, and the potato, were neither cultivated in Asia nor the South Sea Islands.

It is well known that maize was introduced into Japan by the Chinese.—But there are no grounds for believing that the Chinese themselves possessed it until the sixteenth century. We persist then, with Humboldt, in believing that maize was not transported from the centre of Asia to the table lands of Mexico. And, moreover, if we suppose that it was thus transported from Asia, how are we to account for the infinite varieties found in America which, most certainly, were not found in Asia? Is it not more natural to suppose it to have originated where every variety of it was found, than where only one or two varieties, and those very doubtful ones, were ever known before the discovery of America by the Europeans? We may remark, also, that if we suppose that a species of maize was actually known in Central Asia, or to the Chinese, it may have been the case that the Indians of the extreme N. W. of America had communication with the extreme N. E. of Asia, and that some one or two species, by this means, found their way into Asia. If such communication existed, which we do not believe, the fact that it was found in China and about Himalaya, which is by no means established, would not

prove it to be indigenous to Asia. Or, if one or two species were actually found, the fact that there were no more in Asia, and so many in America, would be a strong evidence of its being exotic in Asia."

Parsnips.

This valuable root is daily gaining favor with our farmers, and all information relative to its composition or mode of culture, is eagerly sought after.

The following analysis is by J. H. Salisbury, M. D.

LABORATORY N. Y. STATE AG. SOC.

The plants analyzed were very large, roots fleshy and finely flavored. They were furnished by Mr. Douw, of Greenbush. The average length of the roots, 12 inches; average widest diameter, 3 inches; average length of tops 28 inches.

Per centage of water, dry matter and ash.

	100 parts of fresh root.	100 parts of fresh tops.
Percent of water.....	81.312	89.125
" dry matter.....	18.688	10.875
" ash.....	1.280	1.760
" ash in the dry matter	6.850	16.184

The parsnip root contains a larger per cent. of water than the potato, and a smaller per cent. than the turnip, carrot and beet. About 18½ lbs. in the hundred is dry matter—the rest is water. The tops contain nearly 11 per cent. of dry matter; 7.813 lbs., or almost four tons of the fresh roots, yield 100 lbs. of inorganic matter; 5.682 lbs., or less than three tons of tops yield 100 lbs. of inorganic matter.

Composition of inorganic matter of the Parsnip.

	100 lbs. of the ash of roots.	100 lbs. of the ash of tops.
Carbonic acid.....	21.85	23.51
Silicic acid.....	0.45	0.92
Phosphoric acid.....	15.10	4.31
Phosphate of iron.....	0.65	1.43
Lime.....	3.35	1.22
Magnesia.....	1.60	0.51
Potassa.....	8.45	5.33
Soda.....	33.30	54.32
Chlorine.....	0.60	3.13
Sulphuric acid.....	8.95	3.02
	99.20	98.80

The 100 lbs of inorganic matter removed by 7.813 lbs. of roots, can be returned to the soil by 100 lbs. of ashes, 40 lbs. of common salt, and 15 lbs. of plaster. The 100 lbs. of inorganic matter removed by 5.682 lbs. can be returned by adding to the soil 60 lbs of ashes, 90 lbs. of common salt, and 10 lbs. of plaster.

Proximate organic composition.

	100 parts of fresh roots.	100 parts of dry roots.
Water.....	81.312	
Fibre.....	5.325	28.118
Sugar and extract.....	8.800	46.693
Dextrine.....	2.165	11.300
Casein.....	0.150	0.793
Albumen.....	0.925	4.824
Starch.....	1.395	7.364

Resin.....	0.095	0.501
Gluten.....	0.040	0.211
Yellow coloring matter..	0.020	0.106
Fat.....	0.023	0.119
	100.25	100.000

Besides the above mentioned bodies, the root contains a small quantity of malic acid, and a principle which imparts the peculiar odor to the parsnip.

The root contains a larger per cent. of starch and dextrine than the beet, carrot or turnip, but less sugar and albuminous matter."

From the foregoing it will readily be seen that *Phosphoric acid, Lime, Potash, Soda, Chlorine, and Sulphuric acid*, are the leading requisites of soil for this crop.—The soil should also contain so much organic as will render it free to atmospheric influences, and to be percolated by the long tap-roots.

By decomposing swamp muck with the chloride of lime and carbonate of soda (lime and salt mixture), which we have so often recommended, the necessary chlorine, soda and lime, would be furnished. To this should be added bone-dust or apatite, dissolved in sulphuric acid, supplying by this means both phosphoric and sulphuric acids. Wood ashes may now be added to supply the potash, or what is still better, Peruvian guano, thus securing the necessary quantity of potash in addition to the other constituents, all of which are wanted for maximum crops. The ammonia of the guano will be changed to sulphate and phosphate of ammonia by the bone-dust prepared with sulphuric acid, and thus retained in the soil until needed by the parsnips instead of being lost by evaporation.

Parsnips raised with such a compost, will be found to contain a larger amount of nutritious matter than those raised from farm-yard manures, and to keep later in the season without becoming soft.

Working Farmer.]

To Prepare Bees' Wax.—To obtain wax, boil the comb in a strong muslin bag, in a sauce-pan, with water sufficient to keep the bag from burning; and whilst boiling, continue to press the bag with a wooden slice or spoon, to extract the whole, as you skim off the wax. Drop the wax into cold water where it will swim on the surface. The wax thus obtained will still want refining, to effect which, place it in a clean sauce-pan, and melt it over a slow fire. Then pour off the clear wax into proper vessels, and let it cool. To whiten it, make it in thin cakes, and expose it in the sun.

Agriculture is our country's greatest interest.

The Pendleton Farmers' Society

The anniversary meeting of the Pendleton Farmers' Society was held on the second Thursday and Friday in October. Owing to a balance of a debt contracted by the Society for building a new hall, no premiums were offered for the present year, and consequently but few articles were exhibited, to some of which discretionary premiums were awarded. To Mr. S. E. Maxwell was awarded the premium of a silver cup offered last year for the greatest amount of cotton from an acre of up land which was reported in our August number.

The officers elected for the ensuing year were, Dr. H. C. Miller, President; Col. Wm. Sloan, Vice President; J. W. Crawford, Secretary and Treasurer; and Maj. Geo. Seaborn, Corresponding Secretary and Librarian.

The members of the society present resolved that in order to render the future meetings more inviting and interesting, to form themselves into a Farmers' Conversational Club, to meet monthly and discuss such subjects as should be chosen at a previous meeting. The first meeting of the Club was appointed to be held on Thursday, the 21st of Oct., and the first subject chosen for discussion, *the Pea*.

Owing to indisposition we were prevented from attending this meeting. Many of the members, however, did attend and proceeded to discuss the subject under consideration. The following notes were taken.

First, the kind of Pea:—

Mr. E. Prefers the long, pale, yellow pea—objects to the black, because it does not have a full pod, and does not perfect itself—regards the yellow better for stock and eating—has a tenderer skin—is more easily boiled—speaks not of the pea as an improver of the soil—would prefer the black pea for this purpose, because so hardy and will lie a long time in the ground without being destroyed.

Mr. M. Concurs with E. in the kind of pea—considers it to be the *cow pea proper*—thinks *culture* necessary for all peas—does not estimate highly any pea, because it is able to endure exposure, and will germinate after having laid in the ground a great length of time—says black pea may spring up on stubble ground, but it is *absurd to expect a good crop of peas without culture*—cow pea yields more vine than the black.

Mr. S. Has tried a variety—thinks the

pale yellow better for stock—regards it as a more prolific bearer than any tried—black pea is hardier and earlier—is in doubt which is best upon the whole—thinks highly of the black pea, because it does not injure stock—from its qualities, it resists moisture, consequently does not swell when taken into the stomach of the animal so as to do injury—has tried speckled—has found it a prolific bearer—has found the Sloan pea a more prolific bearer and more able to endure the winter.

Mr. N. Prefers the new pea for planting when the object is to improve the soil or make fodder—believes it produces more vine—thinks old peas when sown produce less vine.

Mr. A. Thinks the yellow, or cow pea, the most productive.

Mr. E. Considers June too late for planting in this latitude—the 10th May the proper time here. On the sea-board standing peas are planted from 1st to 10th July. If planted before that, they turn to vine.

Mr. M. Plants at the same time with the corn—regards it, however, as rather too early—does it as a saving of time—thinks the best time is the first of May—plants between the step and not with the corn—those who have planted in this way this year have made peas—early planting produces more peas, late planting more vine.

Mr. S. Regards the 20th of May too late—has found from the 20th of April to 10th of May the proper time for this latitude.

Mr. A. Thinks the time of planting should be varied with the quality of the land and the object of the crop—thinks on warm or thin upland, the pea should be planted at the first working of the corn, and between the hills of corn—has found this the most economical mode of planting, requiring less labor than planting alternate rows of peas and corn—is of the opinion that the pea lessens the product of corn, but very little if any—thinks on this description of land, the crop should not be gathered, but fed to stock on the ground—on cold or rich uplands or bottom land, he plants at the second working of the corn, and between the hills as above stated—thinks that planting earlier than this on strong land injures the corn crop by the running of the vines up the stalks and overloading them.

Mr. E. Prefers stacking around a pole to any other mode of curing—far more economical than a rail pen. Plants a

stout pole 13 feet long *firmly* in the ground, precisely where the pea vines are thickest. Two holes with inch and a half auger are made through the pole—one 3 feet, the other 6 or 7 feet from the ground, the holes to be at right angles to each other and tough oak rounds, 6 feet long to be passed through them. The pea vines are pulled or cut and stacked on the spot *without a moment's sunning*.—*They must be wet with neither rain nor dew.* In curing blades or hay if rain impends, the farmer stops and cocks up, but in making pea hay, nothing short of actual rain stops you, and if a shower comes, as soon as the water has fallen from the vines, you commence cutting and stacking again. All the anxieties attendant on curing blades and hay are avoided. The diameter of the stack not to exceed six feet. A few half rails or corn stalks are thrown around the pole to hinder the vines from touching the ground. In completing the stack the pea vines are thrown entirely over the head of the pole, and the top of the stack has a somewhat umbrella shape. *Pea hay cured in this way is unrivalled*; it comes out of these stacks so green that it is difficult to realize that it is cured—has some now that is a perfect *nosegay*. Cuts when the first pod is ripe.

Mr. M. Concurs with E. in mode of curing the vine—thinks it important that the vine should be cured in a succulent state, before it begins to mature its pod—thinks that suffering the pea to ripen makes the vine too woody—says that curing pea vine hay in the sun is a bad method, because the leaf falls off and the vine is harder.

Mr. S. Cuts when the oldest pea is fit for table—for curing has tried pen and poles—prefers the latter as more expeditious and because the vine may be stacked immediately, an important matter—when so stacked, the vine may remain without injury a week or a year, in the field.

Mr. W. Prefers cutting with the hoe to pulling the vine—considers it easier, more expeditious and cleaner—does not cut until a good many of the pods are matured—considers the more pods there are formed and matured the better, provided they are not so ripe as to shell out and be lost in handling.

Mr. E. Has made no specific experiments with the pea to ascertain its relative value with corn fodder or other hay—has the highest opinion of its value—never uses it except when cut—considers

it wasteful—thinks from one third to one half is lost if fed without being cut—has a cutting machine which has been in use eight years, and never out of repair; it has a double set of knives, but so durable have the first been, that he has not yet had use for the second; cuts large corn stalks, corn cob and all, with them. The saving of such a machine in a succession of years is incalculable.

Mr. M. Regards the pea valuable for soiling—considers the dry pea, fed in a cooked state, superior to corn, particularly for cows and hogs—has an experiment now in progress—promises to report the result hereafter.

Mr. E. Knows an extensive planter on the sea-board who feeds his mules with one heaped bushel basket full of peas in the hull—no other grain or fodder for the twenty-four hours—says seven bushels of peas in the hull will make one of clean pea.

Mr. A. Cures the vine by stacking around the pole—considers it decidedly the best way he has practised—gathers the vine for hay when the first pods begin to ripen—when the object is fodder he plants by the step in drills, because if planted otherwise and the vine grows luxuriantly it overruns the corn stalks, and is troublesome to extricate from them, is injurious to the corn by pulling down the stalks in gathering—never pulls up the vine by the roots—cuts with a sharp hoe—finds it easier, cleaner, and believes it better for the land—vines cure better without the roots—has gathered this season from an acre of river bottom land, covered from six to twelve inches deep with white sand, eight four-horse wagon loads of excellent pea-vine hay—planted the first of May—considers the product of this acre worth double that of any other acre on his plantation this year.

The experiment of Mr. A., given above, is a very clear proof that *the pea is an excellent subsoiler*. It goes down into another and a new country, and brings up and mingles with the surface soil the most valuable elements of fertility. The roots of the pea, it will be observed, passed through a bed of sand from six to twelve inches and found beneath a soil that produced great luxuriance of vine. Our views upon the various points discussed by the club in our next.—Eds.

Pears.

In an article headed "Fruit" in our last number from a respected correspondent, which should have been given over the

signature "A Subscriber," it is said: "It generally takes pears with the best attention 10, 15 and twenty years to bear after being grafted, as I have learned from those who have raised them." Our friend has surely been misinformed as to grafted pears. We know from experience that a seedling is many years coming into bearing—but we have grafted trees now bearing, the bodies of which are not larger than a hoe handle. They were grafted from one to three feet from the ground on suckers from the roots of bearing trees, and which had been taken up and transplanted a year before grafting on them. The grafts were taken from bearing trees and bore in four or five years after being inserted. Mr. Downing, in his "Fruits and Fruit Trees of America," under the head of "Propagation," &c., says: "The uses of grafting and budding, as applied to fruit trees, may be briefly stated as follows:

"1. The rapid increase or propagation of valuable sorts of fruit not easily raised by seeds or cuttings, as is the case with nearly all varieties."

And further on:

"6. To hasten the bearing of seedling varieties of fruit, or of such as are a long time in producing fruit, by grafting on the branches of full grown or mature bearing trees. Thus a seedling pear, which would not produce fruit on its own roots in a dozen years, will generally begin to bear the third or fourth year, if grafted on the extremity of the bearing branches of a mature tree."

See a practical article on the cultivation of the pear on the quince stock, in No. 9, of our present volume.

EDITORS' TABLE.

MISSING NUMBERS.—If subscribers have failed to receive any of the numbers during the year, and will make known what ones are wanting, we will take pleasure in supplying them.

ACKNOWLEDGMENTS to Mr. BYRD for the paper he has given us the opportunity of placing in this number, we expect him to fulfil his promise to comment upon the applicability of the mode of culture, &c., practised by Mr. Sanders, to the middle and upper country.

SOUTH CAROLINA INSTITUTE.—We had designed to notice the proceedings of this body but circumstances oblige us to postpone it until next month. The same reasons force us to pass unnoticed in this issue the Fair of the Southern Central Agricultural Society, held recently at Macon, Ga.

COTTON AND FROST—After the long drought that prevailed in the summer, rains fell, and many new bolls were formed upon the stock that might have matured, and opened under favorable circumstances, but the late frosts have been so heavy as to utterly destroy them.—There is, now, no hope of realizing anything from the late bolls. The effects of the frosts have, we understand, been pretty much the same throughout the State, and it may be set down a certainty, that the cotton crop of 1851 is considerably lighter than that of 1850 in South Carolina.

THE ILLUSTRATED FAMILY FRIEND—The first number of this literary paper has been placed on our table. It is one of the most tasteful sheets we have ever seen. The energy and ability of Maj. GODMAN, the editor, without doubt will make it a welcome visitor to the fireside of those who are fond of instruction and amusement. It is published at Columbia (S. C.), and we shall be disappointed if it does not merit a wide circulation.

DE BOW'S REVIEW.—The November number is at hand. The table of contents contains the following heads of articles:

The Empire of Russia; The Old Dominion; Reciprocal Influences of Rail Roads and Manufactories; Thoughts on a Rail Road system for New Orleans; Mortality and Hygiene of New Orleans; Department of Commerce; Department of Agriculture; Department of Internal Improvements; Miscellaneous department.

It contains also a superb engraving, and we think a good likeness, of Gen. James Jones, of this State. Says the editor, "Gen. Jones is another of those 'useful' men who better deserve wreaths and laurels than all the helmeted and bannered knights—

"From Macedonia's madman to the Swede."

He is a Carolinian by birth, and though considerably under fifty years of age, may be said to be the pioneer and father of systematic manufactures in the South. With such a reputation, he will need no marble cenotaph, nor lungs of brass, to perpetuate his memory.

Gen. Jones is a graduate of the South Carolina College—that college which has given to the nation a McDuffie, a Preston, and a Legare—a glorious triad, whom the world will not willingly let die. * * * * *

But to return to his civic services, which are those only that give him a

place in our gallery of the practical and industrial men of the South.

Soon after his resignation of the office of Adjutant and Inspector General, he purchased a moiety of the Vacluse Factory establishment, and settled at Vacluse to superintend its operations. In January, 1843, he purchased the other moiety.

Previously to 1841, the Vacluse Factory had been under the management of hired agents, and was a losing concern to its owners; and at the time Gen. Jones took charge of it, he had never seen any other cotton mill.



He soon discovered that the machinery had been abused and neglected; that there was a total absence of order and system in its management; and above all, that the original proprietors had committed the mistake of getting up the establishment under the idea that its productions were to be sold in the neighborhood, and therefore that all the cotton fabrics constituting the stock in trade of a country store, from muslin to cotton bagging, should be manufactured by it. Their notion was to supply all the cotton goods of every kind to their own immediate section of the country, by the productions of one small mill. The consequence was, that in the attempt to get machinery to make *everything*, they got that which would make *nothing* well or profitably.

With such information as Gen. Jones could get from books, and a visit to the Factories of Massachusetts and Rhode Island, he selected the fabric he intended to make (cotton osnaburgs) and went to work, repairing and changing the machinery so as to adapt it to that fabric; and reducing all the operations to a system, so as to have at all times a daily, weekly, and monthly record of the productions of the factory, and its cost per pound of each operation performed to the minute fraction of the thousandth part of a mill. The effect was soon visible.—The production was doubled, and the cost reduced 50 per cent.” * * *

CONTENTS OF THIS NUMBER.

Cotton and its Prospects.....	Page 161
Sweet Bacon	" 163
Salt and Ashes for Stock.....	" 163
Oil of Roses.....	" 163
Shelter for Stock.....	" 163
Millet Grass and Egyptian Millet.....	" 164
Walnut Leaves in the Treatment of Disease	" 164
Sheep Husbandry in S. C.—Col. J. W. Watt's Flock	" 165
Address to Farmers and Planters.....	" 165
Barley—Enquiry	" 166
Our Exchanges	" 167
Plows and Plowing	" 168
Successful Corn Planting.....	" 179
Management of Negroes.....	" 170
Indian Corn	" 171
The Pendleton Farmers' Society.....	" 176
Pears.....	" 176
Editors' Table	" 177
Why not be Independant.....	" 166
To Prepare Beeswax	" 174
Parasites.....	" 174

Land for Sale in Pickens District.

 THE Subscriber offers for Sale  the Tract of Land on which he now resides, lying in the fork of Seneca and Tugaloo rivers, on the main road from Pendleton to Carnsville, and twelve miles from the former place, containing nine hundred (900) acres; about one hundred (100) of which is Beaverdam Bottom. The place has on it a large and comfortable Dwelling House, a good Kitchen, and all other necessary out buildings. The site is a beautiful one, the water fine, and the place as healthy as any in the District. To a purchaser the crop now growing on the place will be sold, if desired, on the most favorable terms.

I. G. GAMBRELL.

Pendleton, S. C., Aug. 13, 1851.

WHITMAN'S AGRICULTURAL WAREHOUSE, BALTIMORE, MD.

THE UNPRECEDENTED and INCREASING INTEREST manifested in AGRICULTURE, and the liberal encouragement which has been given the subscriber, has induced him to engage in the MANUFACTURING business on an EXTENSIVE SCALE. His Factory and Warehouse is now the largest in Baltimore, and probably the most extensive in this country.

His stock for 1851 will consist in part of: 10,000 PLOUGHS embracing his PREMIUM PLOUGHS, and nearly every variety in use from Maine to California.

600 WHITMAN'S PREMIUM CULTIVATORS, at \$4, \$5 and \$6 each.

150 HARROWS, at 6, 7, 8, 9, 10, 11 and \$12 each.

500 PREMIUM STRAW, HAY and CORN-STALK CUTTERS, at 10, 12, 17, 23, 28 and \$37 each.

100 PREMIUM CORN AND COB CRUSHERS, (the best in use) at \$50.

2000 WHITMAN'S PREMIUM CORN-SHELLERS, at 10, 16 and \$18.

2000 PREMIUM WHEAT FANS, GRANT'S and BAMBOROUGH'S (which cannot be equalled) at 25, 28, 30, 32, and \$35.

100 SWEEP POWERS of the most improved plans—Price 90 to \$120.

100 ONE WHEEL or EDDY POWERS, enlarged and improved.—Price \$100.

300 WHITMAN'S PREMIUM THRESHERS the cylinder of which we will warrant to last 100 YEARS, in constant use. This machine breaks less grain and threshes cleaner and faster than any other machine in use.—Price 45 and \$50. Additional price for STRAW CARRIERS, \$15.

100 WHEAT DRILLS which are perfect in their operation, and save enough in the seeding of fifty acres to pay the cost of the Drill.—Price \$100.

100 WROUGHT IRON RAILWAY HORSEPOWERS which received the FIRST PREMIUM at the Maryland State Fair in 1849 and 1850.—Price \$100

100 CORN-PLANTERS, a great labor-saving implement.—Price \$20

REAPING MACHINES, the best in use, price \$125.

50 FIELD ROLLERS, which received

the FIRST PREMIUM at the State Fair, at 30, 40 and \$50.

BURR STONE CORN MILLS—Price \$90 to 120.

A large stock of Chain and Suction Pumps, Water Rams, Ox-Yokes, Root-Pullers, Sausage-meat Cutters and Stuffers, Cow-Milkers, Churns, Post-hole Augurs, Agricultural Furnaces, Hoes, Rakes, Shovels, Spades, Garden and Horticultural Tools, and every description of Farm Implements found in this country.

—ALSO—

FIELD and GARDEN SEEDS of every variety.

FRUIT and ORNAMENTAL TREES. GUANO, and all the various kinds of FERTILIZERS in use, all of which will be sold at WHOLESALE and RETAIL as low as can be had in the United States, the quality considered.

A Catalogue of 120 pages, containing a description of our Implements and Machinery, will be forwarded gratis, if applied for by mail post paid—and all orders accompanied with cash or satisfactory references, will meet with prompt attention.

EZRA WHITMAN, JR.

corner of Light and Pratt Sts.,
BALTIMORE, MD.

January 1, 1851.

THE SPANIARD.

THIS magnificent SPANISH JACK-ASS, who has just made his entrée into America, will, as soon as he recovers from the effects of a long voyage, be ready for the work of procreation. He will have but one Station, and that at my Plantation, on Seneca River, Four Miles North-west of Pendleton Village.

An opportunity of rare occurrence is now offered the country, for the propagation of a splendid stock of Mules, whose superiority for agricultural purposes, will be admitted by all who have given them a fair trial.

In relation to this excellent JACK, suffice it to say,—he cost a great deal of money,—and for size form and action, was one among five of the best that could be procured in Spain by a special agent.

Pre-engagements should be made by all those who are anxious to put to him in the Fall, as his number will be limited to a few.

He will be let to a few Mares during his recovery this Summer.

TERMS.


Twelve dollars Insurance for Mares.

Twenty-five dollars Insurance for Jennets.

J. W. CRAWFORD.

Cold Spring, July, 1851. 8-tf

SUB-SOIL PLOUGHS.

 THE undersigned is Agent for the sale of DR. BROYLES' CELEBRATED SUBSOIL PLOUGH, the utility of which it is unnecessary here to mention, as its superiority over any other similar kind is proverbial.

A. M. BENSON.

Commission Merchant.

Hamburg, S. C., July, 1851. 7-tf